Kenai Peninsula Borough
Coastal Management Plan
Enforceable and Administrative Policies

Effective Dates:

July 3, 1990

Original coastal management program goes into effect.

March 23, 1992

Port Graham/Nanwalek AMSA Plan goes into effect and supplements the Kenai Peninsula Borough Coastal Management Program.

2.0 Coastal Development

2.1 Navigation Obstruction

Structures, pipelines and buoys placed in navigable waters shall be visibly marked and placed to minimize navigation hazards or obstruction.

2.2 Floating Facilities

For purposes of this section, a "floating facility" is defined as a raft, houseboat, barge, or boat, whether powered or not, that is moored or anchored in any certain location, excluding harbors and marinas, for a period of 14 days or more, and is not primarily intended for transportation.

a. The following criteria shall be considered in determining whether or not to permit a floating facility at a specific site:

1. Potential conflicts with recreation sites, mariculture sites, fish and wildlife concentration areas, subsistence use areas.

2. Number of people positively or negatively impacted by the facility and the degree of impacts.

3. The length of time the facility will be in place at the site, with seasonal or short-term uses given greater consideration than long-term use.

4. The complexity of the facility, with greater scrutiny being directed toward a facility taking up a large area, and/or having broader or more pronounced impacts on the environment than a small facility would generate.

5. The appropriateness of the site to accommodate a floating facility, in terms of its physical characteristics, including, but not limited to: tidal flushing, anchorage, hazards to navigation, proximity to other floating facilities or uplands users, site specificity (the need for the facility to be located at a specific site).

6. Existing regulations and restrictions on uses of the area, as well as adjacent areas.

b. Floating facilities shall be prohibited in the following areas, unless a significant public benefit results from the proposed use, and there are no feasible and prudent alternatives for the proposed use:

1. Habitat or Harvest Areas - Areas identified by the Alaska Department of Fish and Game as having concentrations of shellfish, waterfowl, shorebirds; marine mammals; productive tideflats, salt marshes, kelp or eel grass beds; trees used by bald eagles for nesting or roosting; and important fish and wildlife harvest areas.

2. Historic, Archaeological, or Recreational Sites - Sites listed by the Alaska Department of Natural Resources Historic Preservation Officer as eligible for inclusion in the National Register of Historic Places; sites identified by other management agencies as historic or archaeological sites, or areas of significant recreation use.

3. Navigational Hazards - No floating facility shall moor, anchor, or otherwise block narrow waterways or passages or impact the free passage of waterborne traffic, as specified in U.S. Coast Guard regulations.

c. The following requirements shall apply to any floating facility permitted in a specific location within the District:

1. Notification of Upland Owner - Floating facilities shall not be permitted on tidelands adjacent to privately owned uplands without consultation with the upland owner. The upland owners adjacent to the tidelands have first preference to a lease given under AS 38.05.075 or AS 38.05.850(a) for tidelands adjacent to their property.

2. Grounding - To the extent feasible and prudent, floating facilities shall be moored in a minimum of 12 feet of water present during mean lower low water or 0.0 tide stage, and avoid shallow areas where they could settle on or abrade the substrate during low tides.

3. Proper Anchoring - Floating facilities shall utilize anchoring methods similar to a marine vessel and shall not utilize shore ties or other means which restrict passage around their location unless specifically approved by the appropriate agency as meeting regulatory requirements. Anchors shall be of sufficient weight and holding capability to keep the facility in its proper location without drifting into an unacceptable location or onto the beach.

4. Removal - An owner or operator shall be responsible for promptly removing and disposing of floats, docks, rafts, boats, and floathouses or other related materials when the structure is no longer being properly maintained or the lease or permit has expired. Facilities shall be removed within the time period specified by the permitting agencies. Abandonment, casting loose, or disposal on a beach are prohibited as disposal methods. Proper maintenance, at a minimum, means that the structure is of sound construction and does not present a hazard.

2.3 Commercial Fishing

a. To the extent feasible and prudent, all temporary and permanent developments, structures, and facilities in marine and estuarine waters shall be sited, constructed, and operated in a manner that does not create a hazard or obstruction to commercial fishing operations.

b. Within marine and estuarine waters of the coastal area, operators of activities relating to oil, gas, and mining exploration and production, shall provide timely written notification to a list of fishing organizations maintained by the Kenai Peninsula Borough to apprise commercial fishing interests of the schedule and location of development activities prior to initiation of the project. This notice shall include a schedule of activities and a map or description of any potential conflicts or physical obstructions which may impact or preclude commercial fishing opportunities or damage/contaminate fishing gear including but not limited to subsea pipelines, subsea wellhead structures, and modifications to the natural shoreline topography or sea-bottom profile (e.g., causeways, artificial islands, dredge spoil disposal sites).

c. To the extent feasible and prudent, offshore resource exploration and development activities shall be scheduled and/or located to avoid interference with commercial fishing and subsistence activities.

2.4 Dredging and Filling

Projects that require dredging or filling in streams, rivers, lakes, wetlands, or saltwater areas including tideflats, will be located, designed, constructed, and maintained in a manner so as to:

a. avoid significant impacts to important fish and wildlife habitat;

b. avoid significant interference with fish migration, spawning, and rearing as well as other important life history phases of wildlife;

c. limit areas of direct disturbance to as small an area as possible;

d. minimize the amount of waterborne sediment traveling away from the dredge or fill site; and

e. maintain circulation and drainage patterns in the area of the fill.

2.5 Disposal of Dredged Material

Dredged materials disposed onshore will be diked or similarly contained and stabilized in order to prevent erosion or leaching of harmful or toxic substances into wetlands or fishbearing waters.

2.6 Mitigation

All land and water use activities shall be planned and conducted to mitigate potential adverse impacts on fish and wildlife populations, habitats, and harvest activities. Mitigation shall include the following sequential steps:

a. Avoid the loss of natural fish and wildlife populations, habitat, and harvest activities;

b. When the loss cannot be avoided, minimize loss by incorporating measures to reduce the amount or degree of loss;

c. When the loss cannot be avoided or minimized, restore or rehabilitate the resource that was lost or disturbed to its pre-disturbance condition, to the extent feasible and prudent; or

d. When loss or damage is substantial and irreversible and the above objectives cannot be achieved, compensation for the resource and/or harvest loss shall be considered. In the case of loss of habitat production potential, enhancement of other habitats shall be considered as an alternative means of compensation. In general, compensation with

similar habitats in the same locality is preferable to compensation with other types of habitat or habitats located elsewhere.

The cost of mitigation relative to the benefits to be gained will be considered in the implementation of the policy.

2.7 Cumulative Impacts

The cumulative effects of proposed new and existing development on ambient air and water quality and coastal habitats shall be considered in the review or renewal of coastal projects.

3.0 Geophysical Hazards

3.1 Design and Siting Criteria

Development in areas with known geological hazards shall be located, designed, constructed and managed to minimize risk to human life and property damage.

3.2 Floodway and Floodplain Development

To the extent prudent and feasible, structures (including bridges and flood diversion structures such as dikes) shall not be located in the floodway. Bridges and culverts that cross the floodway shall be designed and maintained to accommodate flow through the structure with no increase to base flood levels and to avoid retaining and spreading flood waters behind them. Development in the 100-year floodplain, as defined by the Flood Insurance Rate Map (FIRM) prepared for Federal Emergency Management Agency, is contingent upon obtaining a Floodplain Development Permit from the Kenai Peninsula Borough.

3.3 Erosion

Development and resource extraction activities shall be sited and conducted to minimize accelerated shoreline erosion or adverse impacts to shoreline processes. Developers shall retain existing vegetative cover in erosion-prone areas to the greatest extent feasible and prudent. In cases where development or other activities lead to removal of vegetation, erosion shall be prevented or, if it occurs, shall be remedied through revegetation or by other appropriate measures.

3.4 Landslides, Mass Wasting, and Avalanche Hazards

Unless there are no feasible and prudent alternatives new developments shall avoid areas subject to landslides, mass wasting, and avalanche hazards. Developments shall incorporate appropriate siting/design/construction measures to avoid increasing risk to existing or potential development.

3.5 Use of Public Land

State and Borough land in the 100-year floodplain and other hazard-prone areas shall be maintained in public ownership unless a greater public need would be met by disposing or developing such land and appropriate design and construction techniques are incorporated to minimize risk to life and property.

4.0 Recreation and Public Access

4.1 Recreational Use Designation

The following areas within the Kenai Peninsula Borough Coastal Management Boundary shall be designated for recreational use:

a. State, federal and local parks, trails and recreational facilities.

b. Public land or water which receives significant use by sport fishermen, clam diggers or recreational users.

c. Public land or waters which have high potential for recreational use because of physical, biological, or cultural features.

4.2 Conflicts with Recreational Use

Activities which could conflict with recreational use of designated recreation areas shall be conducted to minimize conflicts.

4.3 Open Space Areas

Publicly owned shorelines, beaches and upland areas which possess high value recreation, scenic, wildlife or environmental quality or are subject to natural hazards, shall be retained as public open space or recreation areas.

4.4 Public Access

Public access routes to coastal waters and recreational land shall be maintained and to the extent feasible and prudent, increased when public land is leased, disposed, or subdivided.

5.0 Energy and Industrial Development

5.1 Industrial Facility Siting

The siting and approval of major industrial facilities and related activities are subject to State Standards 6 AAC 80.070(b) regarding energy facility siting with the following additions to said State standards: Numbers 1 through 7 and numbers 11 through 14 of the State standards shall be expanded to encompass "related activities" in addition to "facilities."

5.2 Water Resources

a. Commercial/Industrial operations shall use necessary measures to prevent drilling wastes, oil spills, and other toxic or hazardous materials from contaminating surface and groundwater.

b. Any industrial water withdrawal shall comply with the requirements of AS 46.15 and may require that aquifer testing of the production well(s) and monitoring of nearby public or private wells be conducted. Results of testing shall be submitted to the Kenai Peninsula Borough and the Alaska Department of Natural Resources; these results should demonstrate what effects the withdrawal of water necessary to serve the fully developed project will have on prior water rights holders within the area of influence.

5.3 Use of Existing Facilities

To the extent feasible and prudent, existing industrial facilities or areas and pipeline route shall be used to meet new requirements for exploration and production support bases, transmission/shipment (including pipelines and transportation systems), and distribution of energy resources.

5.4 Habitat Protection

Projects which require dredging, clearing or construction in productive habitats shall be designed to keep these activities to the minimum area necessary for the project.

5.5 Navigation and Commercial Fishing

Activities associated with oil and gas resource exploration, industrial development, or production shall minimize navigational interference and be located or timed to avoid potential damage to fishing gear. Offshore pipelines and other underwater structures will be located, designed or protected so as to allow fishing gear to pass over without snagging or otherwise damaging the structure or gear.

5.6 Pipelines

Pipelines and pipeline right-of-ways shall, to the extent feasible and prudent, be sited, designed, constructed, and maintained to avoid important fishing grounds and to minimize risk to fish and wildlife habitats from a spill, pipeline break, or other construction activities. Pipeline crossings of fishbearing waters and wetlands important to waterfowl and shorebirds shall incorporate mitigative measures, to the extent feasible and prudent, to minimize the amount of oil which may enter such waters as a result of a pipeline rupture or leak.

5.7 Offshore Structure Debris

Debris from offshore construction activities shall be removed to an approved onshore disposal site on or before completion of construction.

5.8 Oil Storage

a. Oil produced in offshore areas shall be transported to shore for storage unless transport is determined to have a greater potential for adverse environmental impact than offshore storage.

b. Oil storage facilities shall be located and bermed in accordance with Policy 13.2 in the Air, Land and Water Quality section of these policies.

5.9 Geophysical Surveys

a. Geophysical surveys will, to the extent feasible and prudent, be located, designed, and constructed in a manner so as to avoid disturbances to fish and wildlife populations, habitats, and harvests. Seasonal restrictions, restrictions on the use of explosives, or restrictions relating to the type of transportation utilized in such operations will be included as necessary to mitigate potential adverse impacts.

b. Geophysical surveys in fresh and marine waters supporting fish or wildlife will require the use of energy sources such as airguns, gas exploders, or other sources that have been demonstrated to be harmless to fish and wildlife and human uses of fish and wildlife. Blasting for purposes other than geophysical surveys will be approved on a case-by-case basis after all steps have been taken to minimize impacts and when no feasible and prudent alternatives exist to meet the public need.

c. Vessels engaged in offshore geophysical exploration will conduct their operations to avoid significant interference with commercial fishing activities.

Intent: Policy 5.9(b) balances several uses of state concern and national interest, including the exploration and production of oil and gas resources and the production and utilization of the fisheries of Cook Inlet and the Gulf of Alaska. After considering the information available on the value of the fisheries, the potential adverse impacts associated with the use of seismic activities in the transitional zone, the state and Kenai Peninsula Borough have serious concerns about the use of explosives for seismic exploration in marine waters. The state recognizes that a limited use of explosives may be necessary to obtain quality seismic data in certain areas of the transitional zone,

such as when there is a need to "tie" geophysical information between potential offshore lease tracts and onshore well sites.

Implementation of Policy 5.9(b) will be based on the best available scientific information relative to the significant adverse impacts of explosives and other seismic technology on fish and wildlife. The State of Alaska is reviewing its current policy pertaining to the use of explosives in marine waters, evaluating alternative means of collecting seismic information in the transition zone, and evaluating measures to mitigate adverse impacts on marine life and fishery activities. Should a review of new information and the continuing evaluation of the state's seismic policy by the Kenai Peninsula Borough and the State of Alaska indicate a change to this policy is warranted, the state will pursue such a change.

5.10 Alternative Energy

Projects using energy sources such as wind, solar, and geothermal will be permitted provided the project conforms to the policies contained in this program and all other applicable laws.

5.11 Hydroelectric Power

Hydroelectric projects will not dam, divert, or reduce water levels in rivers, streams, or lakes that support important commercial, subsistence, or recreational fish species unless the project is designed to mitigate loss to fish production and any interference with navigation.

6.0 Transportation and Utilities

6.1 Ports and Harbors

a. Ports, harbors and docks shall avoid extensive tideflats and wetland areas and be designed and located so as not to obstruct fish passage along the coast or in waters used by anadromous fish.

b. If solid fill must be used, it shall be located and constructed to maximize water circulation in the harbor.

c. Harbors, small boat harbors, and marinas must provide facilities for proper handling of sewage, solid waste, fuel and waste oil.

d. The area immediately surrounding small boat harbors shall, to the extent feasible and prudent, be reserved for harbor-related and water-dependent uses.

e. To the extent feasible and prudent, piers, docks, boat ramps and other waterfront facilities on public land shall be designed and operated for cooperative or public use to avoid duplication of facilities.

6.2 Stream Crossings

a. Road, pipeline, and utility crossings of anadromous fish streams shall be minimized and consolidated at single locations to reduce multiple impacts to both watersheds and individual stream channels. In addition, stream crossings shall minimize areas of disturbance.

b. All bridges and culverts installed shall be large enough to provide for the free passage and spawning activities of anadromous fish and shall be positioned to minimize changes in the direction or velocity of stream flow.

6.3 Public Access

Prior to disposal of State and Borough lands, public access routes, such as roads and trails, shall be identified and dedicated.

6.4 Pipelines and Utilities

a. To the extent feasible and prudent, existing pipeline and utility corridors shall be used for new facilities or expansion of existing facilities, rather than developing new corridors.

b. Where feasible and prudent, pipelines and utilities shall be installed underground in areas of high recreational or scenic value or intensive public use.

c. To the extent feasible and prudent, underwater pipelines shall be buried. If pipelines are not buried they shall be designed to allow for the passage of fishing gear, or the pipeline route shall be selected to avoid important fishing areas, and anadromous fish migration and feeding areas.

d. Overhead utility lines shall be visibly marked where necessary to avoid hazard to low-flying aircraft.

7.0 Fishing and Seafood Processing

7.1 Suitable Areas

The following areas are identified as being suitable for location or expansion of seafood processing facilities and fishery-related industry, however, this is not intended to be an exclusive list precluding development or expansion in other areas. Siting, design, construction, and operation of facilities shall conform to applicable ACMP standards, policies of this plan, and other appropriate laws:

a. Seward waterfront

b. Homer Spit

c. Seldovia waterfront

d. Port Graham waterfront

e. Ninilchik Spit

f. Kasilof River, lower 5 miles

g. Kenai River, below Warren Ames Bridge

h. Nikiski waterfront

i. Beluga/Tyonek area - future expansion

j. Stariski area - future expansion

7.2 Water Dependent Uses

In considering land-use applications and permits for wetlands fill and other coastal development in areas identified in Policy 7.1, Fish and Seafood Processing and support facilities shall be considered water-dependent uses.

7.3 Maintenance and Enhancement of Fisheries

Maintenance and enhancement of fisheries shall be given high priority in reviewing proposed projects which might adversely impact important fisheries habitat, migratory routes and harvest of fish or shellfish.

7.4 Placement of Structures

To the extent feasible and prudent, all temporary and permanent developments, structures, and facilities constructed or placed in marine and estuarine waters of the Kenai Peninsula Borough area shall be sited, constructed, and operated in a manner that does not create a hazard or obstruction to commercial fishing operations.

7.5 Fisheries Enhancement Programs

Land and water in areas identified by the Department of Fish and Game or Cook Inlet Aquaculture Association for fisheries enhancement programs shall be managed to be compatible with those programs.

7.6 Fish Enhancement and Stocking

Fish enhancement and stocking projects shall use local, indigenous stocks whenever possible to maintain the genetic integrity of wild and indigenous fish population.

8.0 Mariculture (Aquatic Farming)

8.1 Finfish Farming

Aquatic farming of salmon or other finfish is prohibited within the marine and estuarine waters of the Kenai Peninsula Borough. Fisheries enhancement and stocking in which juvenile fish are released to marine waters to mature and be commercially harvested are acceptable fish and wildlife management practices where it has been determined to be scientifically sound and where public review shows it to be in the public interest.

8.2 Siting Criteria

Mariculture facilities within the coastal boundary of the Kenai Peninsula Borough shall meet the following siting criteria:

a. Potential mariculture sites shall be in areas of low conflict with existing uses. Where appropriate, facilities will be consolidated to minimize impacts on other users. Separation distances between farms shall be

established in order to minimize cumulative impacts on water quality and potential for disease transmission.

b. Sites must have flushing characteristics and depth necessary to ensure that existing water quality and habitats will be maintained or enhanced and to minimize the potential for disease transmission.

c. Potential mariculture/aquaculture sites shall be in areas of low conflict with existing uses; the following areas shall be avoided where incompatible:

1. The mouth of anadromous fish streams, identified by the Alaska Department of Fish and Game;

2. Important habitat areas for existing species of fish, shellfish, waterfowl, seabirds or marine mammals;

3. Important kelp and eelgrass beds;

4. Recreation, subsistence or sport fishing and hunting areas receiving significant public use;

5. Commercial fishing areas;

6. Fishery enhancement sites;

7. Areas of vessel traffic;

8. Tidelands contiguous to privately owned uplands.

8.3 Anchoring [Administrative Policy]

Mariculture facilities shall be securely anchored with an anchor of sufficient size and holding capacity to keep the facility in its proper location. Shore anchoring cables or other shore attachments shall not be used in areas where they could pose a hazard to navigation.

8.4 Visibility

All mariculture facilities shall be visibly marked with paint, buoys or lights to meet U.S. Coast Guard requirements.

8.5 Public Notice Requirements

In accordance with Alaska Statute 38.05.945 and 38.05.856, the State shall notify the public, individuals, and organizations affected by activities related to aquatic farming (mariculture), sale, lease, or disposal of state land or resources. Among those notified are the Kenai Peninsula Borough, Village and Regional Corporations, Regional Fish and Game Councils, and Community Councils.

For Aquatic Farm sites (mariculture), a public hearing is required under Alaska Statute 38.05.946, in addition to the requirements under AS 38.05.945.

8.6 Reporting Requirements

Mariculture permit holders shall prepare reports and development plans for the permitting agencies. At a minimum these shall summarize the species and volumes of seafood produced.

9.0 Timber Management

9.1 Management Activities

Forest management activities shall be planned and managed so as to:

a. Minimize adverse environmental impacts to fish and wildlife populations and their habitats;

b. Ensure the free passage of anadromous and resident fish in rivers, streams, lakes, and marine waters;

c. Minimize conflict with recreational uses and activities;

d. Minimize sedimentation, erosion and alteration of natural drainage patterns;

e. Minimize adverse visual impact in areas with high scenic value;

f. Maintain long-term productivity of forest soils and ecosystems, reduce epidemic infestations of forest pests, reduce hazard of forest fires; and

g. Promote regeneration of harvested forests.

9.2 Log Transfer and Storage

a. Logs shall be stored above mean higher high water (MHHW) wherever feasible and prudent.

b. Sites for in-water dumping and storage of logs shall be selected and these activities conducted so as to minimize adverse affects on the marine ecosystem, accumulation of bark and toxins, conflicts with recreational uses and activities, navigation hazards and exposure to storms.

10.0 Mining and Mineral Processing

10.1 Sand and Gravel Priority Areas

To the extent feasible and prudent, sources of sand and gravel shall be authorized in a descending order of priority as follows:

a. Existing, approved upland sand and gravel pits;

b. Reuse of sand and gravel from abandoned development areas;

c. New upland sand and gravel pits;

d. Rivers, streams, and lakes that do not support fish;

e. Marine shoreline and offshore sand and gravel sources; and

f. River and floodplain sand and gravel sources in fishbearing streams in the following order of highest to lowest preference: braided, split channel, meandering, sinuous, and straight. When possible, exposed sand and gravel bars in broad, active floodplains shall be considered for mining of sand and gravel.

10.2 Mining and Extraction from Rivers and Streams

Placer mining activities and sand or gravel extraction from rivers or streams are subject to the following standards:

a. Extraction of placer materials shall avoid significant adverse impacts to important habitats and fishing activities. Sand and gravel shall not be removed from areas which have been documented to provide spawning or overwintering habitat for anadromous fish.

b. Placer mining operations which discharge processing wastewater to rivers or streams shall incorporate sediment control practices or facilities into their design and operation that minimize sediments and other contaminants contained in discharged waters. The concentration of pollutants in discharged process wastewater shall not exceed the limits established by Environmental Protection Agency (EPA) and imposed under the terms of an NPDES permit or established by Alaska Department of Environmental Conservation (ADEC) and imposed under the terms of a wastewater discharge permit.

c. Maximum use of recycled water shall occur to minimize water withdrawal from the stream and subsequent discharge of effluent to adjacent waters.

d. All placer operations shall be designed, constructed, and operated in compliance with applicable state and federal regulations and water quality standards.

e. To the extent feasible and prudent, changes to channel hydraulics shall be avoided.

f. Sand and gravel pits shall be located to minimize the probability of channel diversion through the site.

g. The effects of sand and gravel removal on nearby lands and waters shall be minimized by maintaining vegetative filter strips or buffers around areas of sand and gravel extraction between active channels and the work area and by avoiding instream work, unnecessary clearing of riparian vegetation, or disturbance to natural banks.

h. If the work area may be inundated by high water during the period of operation, temporary dikes shall be constructed around the site to segregate the work area from active channels and avoid the entrapment of fish.

i. To the extent feasible and prudent, site configurations shall avoid the use of long straight lines and shall be shaped to blend with physical features and surroundings to provide for diverse riparian and aquatic habitats.

10.3 Offshore Mining

Offshore mining activities are subject to the following standards:

a. Mining for locatable minerals in offshore areas shall be conducted in a manner so as to avoid interfering with commercial fishing activities, navigation and adverse impacts to fish and wildlife habitat and the populations utilizing such habitat.

b. Mining on tidelands adjacent to privately owned uplands shall be conducted in a manner which does not conflict with access to or use and enjoyment of the adjacent upland area.

c. This policy applies to extraction of offshore minerals within a one-mile radius from the ordinary high water mark of anadromous fish streams, measured from their confluence with mean lower low water, or within one mile of clam beaches identified in the Alaska Department of Fish

and Game Habitat Management Guidebooks, or with the best information available at the time of project review. Such extractions may be allowed only after the project applicant provides information demonstrating to appropriate state agencies and the Borough that mining and related activities will avoid significant adverse impacts to anadromous fish, clam populations, and their habitats.

d. Extraction of sand and gravel recoverable minerals from the sea bottom in offshore areas shall avoid significant adverse impacts to important and essential habitats, commercial and sport fishing activities, subsistence harvest activities, natural coastal erosion and deposition, and navigation.

e. Dredge spoils and processed materials shall be discharged on the sea bottom in the area from which they were extracted, unless discharge in an approved offshore or onshore site would cause less impact to the environment and other coastal activities.

f. In areas where toxic substances occur naturally in bottom sediments, offshore mining activities shall not be allowed to resuspend such naturally-occurring toxic substances into the water column in amounts that would contribute to increased bioaccumulation of toxic substances in marine organisms or fish or endanger human health.

10.4 Overburden Disposal

Overburden shall not be disposed of in lakes, within the 100 year floodplain of streams or rivers, or below the limit of mean high water in intertidal areas and estuaries. Whenever feasible and prudent, overburden in upland areas shall be saved and replaced on the disturbed area to conform to the natural topography as part of the reclamation process.

10.5 Reclamation and Restoration

Reclamation of all upland and floodplain mined sites shall be required unless such reclamation would cause greater adverse impact to the environment than would leaving the site unreclaimed. At a minimum, reclamation shall include the following elements, as applicable:

a. Topsoil shall be segregated from overburden, and both shall be stored above the 100-year floodplain of water courses.

b. At the end of each mining season all disturbed areas within the 100-year floodplains of streams that support anadromous fish shall be regraded to stable slopes with ground contours which will not entrap fish. Tailings used in the construction of settling ponds and other essential facilities may be retained in place until completion of use.

c. At the completion of mining activities or gravel extraction, all disturbed areas shall be graded to stable slopes that blend with the natural topography. Erosion control measures shall be implemented to stabilize the site, areas designated for revegetation shall be covered with topsoil to encourage establishment of native or other selected plants, and erosion-prone areas requiring immediate cover shall be seeded with a cover crop. Alternatively, excavated pits may be converted into fish and wildlife habitat areas.

10.6 Access to Minerals

Continued access across public lands for mineral exploration and development activities will be allowed to the extent it conforms with the policies contained in this program and all other applicable laws. On public lands identified as having high potential for minerals or sand and gravel, surface uses shall be managed to maintain opportunities for future mining activities where feasible and prudent.

11.0 Subsistence

11.1 Subsistence Resources

All uses and activities in areas traditionally used for subsistence shall accommodate the use of subsistence resources in the planning, development, and operation of these activities.

11.2 Subsistence Projects

Projects in areas traditionally used for subsistence shall be located, designed, constructed, and operated to minimize adverse impacts to subsistence resources and activities.

11.3 Land and Water Plans

Land and water use plans for public land and waters surrounding the communities of English Bay, Port Graham, Seldovia, and Tyonek shall avoid or minimize impacts to subsistence resources and activities.

11.4 Subsistence Access

Traditional and customary access to subsistence use areas shall be maintained unless reasonable alternative access is provided to subsistence users.

A13 Subsistence Resource Mapping [Administrative Policy]

The Borough Planning Department will work with the communities of English Bay and Port Graham to designate subsistence areas important to these communities as part of the AMSA plan for this area.

12.0 Fish and Wildlife Habitat

12.1 Priority Use

Maintenance and enhancement of fish habitat shall be the highest priority use when reviewing proposals for activities which may adversely impact critical spawning, rearing, migration or overwintering areas for fish and shellfish.

12.2 Appropriation of Water

Appropriation of surface or intergravel waters from streams shall not occur at a withdrawal rate or timing which adversely affects anadromous fish habitat, as determined by the Alaska Department of Fish and Game, unless, under the procedures outlined in AS 46.15, the Commissioner of the Department of Natural Resources makes a finding based on public review that the competing use of water is in the best public interest and no feasible and prudent alternative exists.

12.3 Fish Passage

Development activities, facilities and structures shall be designed, sited, constructed and operated in a manner which does not impede or interfere with timely access and movement of fish. Causeways, gravel berms, culverts, and other obstructions or constrictions to fish movement are of particular concern. Existing fish passage problems, including perched culverts, man-made stream obstructions, and velocity barriers shall be corrected by the entity responsible for the problem.

12.4 Bank Stabilization

All bank cuts, fills and exposed earthwork adjacent to a wetland or waterbody must be stabilized to prevent erosion and sedimentation which may occur during or after construction. Bank stabilization measures shall be designed and constructed to protect habitat values by including irregular bank contours and insuring that nearshore water velocities do not increase.

12.5 Water Intake Structures

Water intake pipes used to remove water from fishbearing waters shall be surrounded by a screened enclosure and velocity shall be limited so as to prevent fish entrainment and impingement.

12.6 Use of Explosives

To protect fish, sensitive marine mammals, and other aquatic fauna, explosives shall not be detonated within, beneath, or adjacent to marine, estuarine, or fresh waters that support fish and wildlife during periods when fish or marine mammals are present unless the detonation of the explosives produces an instantaneous pressure rise in the water body of no more than 2.5 psi (pounds per square inch) or unless the water body, including its substrate, is frozen.

12.7 Seabird Colonies and Marine Mammal Haul-outs

Seabird colony sites and haul-outs and rookeries used by sea lions and harbor seals (as identified in ADF&G Regional Guides or with the best available information at the time of project review) shall not be physically altered or disturbed by structures or activities in a manner that would preclude or interfere with continued ties in a manner that would preclude or interfere with continued use of these sites. To the extent feasible and prudent, development structures and facilities with a high level of noise, acoustical or visual disturbance shall maintain a one-half mile buffer from identified use areas for sea lions, harbor seals, and marine birds during periods when these species are present.

12.8 Whale Migration and Feeding Areas

Uses and activities within or adjacent to coastal waters shall not interfere with migration or feeding of whales. Interference refers to conduct or activities that disrupt an animal's normal behavior or cause a significant change in the activity of the affected animal.

12.9 Bald Eagles and Nest Sites

Activities shall avoid harming or disturbing bald eagles or their nest sites in accordance with the Bald Eagle Protection Act (16 USC 668) by timing operations when eagles are not breeding or nesting (generally September 1 to March 1), retaining a buffer of undisturbed natural vegetation around occupied and unoccupied nest trees, or both. The use and size of buffers shall be determined on a case-by-case basis by the U.S. Fish and Wildlife Service and Alaska Department of Fish and Game and may vary with topography, timber type, wind firmness, type of activity, or other factors, but will generally be about 330 feet wide.

13. Air, Land, and Water Quality

13.1 Hazardous and Toxic Substances

Hazardous materials, petroleum, or petroleum products as defined in State and federal regulations, shall not be disposed of in the Borough unless done so at a facility designed and approved for this purpose.

13.2 Storage of Petroleum and Petroleum Products

a. To the extent feasible and prudent, facilities for the storage, processing, or treatment of petroleum or petroleum products exceeding 660 gallons capacity shall not be sited within the 100 year floodplain.

b. Where petroleum-related storage is permitted outside of the 100-year floodplain, buffer zones of not less than 100 feet shall be required to separate oil storage facilities from rivers, streams, lakes, wells, wetlands, or marine waters which provide domestic or public water supplies, or support anadromous fish populations, as well as areas of human settlement or use which are highly susceptible to petroleum contamination. Buffer zone widths greater than 100 feet may be established by the Borough in consultation with the Alaska Departments of Environmental Conservation and Natural Resources and shall be based on site criteria, such as depth of seasonal high water table, slope, aspect, and permeability of surrounding soils and substrata.

c. Impermeable berms and basins capable of retaining 110 percent of storage capacity plus 12 inches of freeboard shall be required for all above-ground storage facilities to minimize the potential for uncontained spills or leaks.

14.0 Archaeological and Historic Resources

14.1 Historical and Prehistoric Sites

Prior to development activities, historical and prehistoric sites identified and listed on the Alaska Heritage Resource Inventory will be reviewed by the Department of Natural Resources. The inventory is maintained by the Division of Parks and Outdoor Recreation, Office of History and Archaeology.

14.2 Protection from Disturbance

If previously undiscovered artifacts or areas of historic, prehistoric, or archaeological importance are encountered during development activities, the site shall be protected from further disturbance and the State Historic Preservation Office shall immediately be notified to evaluate the site or artifacts.

A1 Erosion : [Administrative Policy]

The following performance standards should be considered for development on slopes exceeding 15 percent

a. For slopes of 15 to 30 percent, the area used for development should not exceed 25 percent of the site.

b. For slopes of 31 percent or greater, the areas used for development should not exceed 10 percent of the site.

The areas used for development include all structures, roads and driveways.

A2 Reclamation of Recreational Areas [Administrative Policy]

For recreational areas and trails discovered to be deteriorating because of overuse, the Borough encourages reclamation by the responsible management agency.

A3 Improved Access to Facilities [Administrative Policy]

The Borough encourages the development of improved trails, boardwalks, fish cleaning stations, picnic areas, and litter and waste disposal sites within designated recreational areas to prevent or minimize any adverse affects to the surrounding natural environment which could be caused by heavy foot traffic, extensive firewood gathering, or improper disposal of waste.

A4 Easements and Rights-of-Way [Administrative Policy]

Development and use of section line easements and public rights-of-way to coastal water bodies should be managed to minimize adverse impacts to sensitive habitat and adjacent private lands.

A5 Development Plans for Public Review [Administrative Policy]

The Borough will make available for public review copies of all oil and gas exploration or development plans it receives from the state as part of the state's oil and gas lease sale process.

A6 Prevention and Cleanup of Oil Spills [Administrative Policy]

The Borough shall pursue the development and adoption of policies and plans relating to the prevention and cleanup of oil spills.

A7 Road Design [Administrative Policy]

In addition to considering safety, cost, and efficiency in road design, the Borough encourages consideration of the needs of non-motorized travelers, scenic values, and ways to minimize disruption to private lands and landowners located along rights-of-way.

A8 Fish Passage Improvements [Administrative Policy]

The Borough favors the continued cooperative efforts by the Alaska Department of Fish and Game, Cook Inlet Aquaculture Association and other state and federal agencies to accomplish stream or fish passage improvements and increase fish habitat throughout the Borough.

A9 Inventory of Commercial and Sport Fishing Interest [Administrative Policy]

The Borough Planning Department shall maintain a list of commercial and sport fishing organization and make this list available to entities conducting activities in fishing areas within the Borough to assist in notification requirements provided in 3.2 Coastal Development, section D., Policy 3c.

A10 Public Information [Administrative Policy]

The Borough Planning Department shall maintain project information and maps provided by developers conducting activities in fishing areas within the Borough and make this information available on request to the public.

A11 Disposal of Wastes [Administrative Policy]

Uses of fish processing by-products and wastes should be promoted, and disposal of processing wastewater and fish scrap should meet applicable state and federal water quality and waste disposal standards.

A12 Consistency Review [Administrative Policy]

The Borough supports amendments to the Forest Practices Act to make activities associated with timber harvest subject to coastal management consistency review.

A14 Wetlands Mapping [Administrative Policy]

The Borough shall obtain funding to research and map wetlands in developing areas and apply for Corps of Engineers General Permits in non-critical wetland areas to reduce wetland permit requirements for individuals.

A15 Wetland Ordinance

The Borough shall develop a wetlands ordinance to address the subdivision, drainage, and filling the wetland areas for future development. [Administrative Policy]

A16 Water Resources [Administrative Policy]

The Borough encourages the Alaska Department of Fish and Game to both: 1) identify streams within the Kenai Peninsula Borough with the highest priority for establishing reservation of instream flows (AS 46.15.145); and 2) work towards establishment of this reservation.

A17 Monitoring [Administrative Policy]

The Borough encourages the State of Alaska to develop monitoring procedures with latest technology.

A18 Identification and Designation of Areas [Administrative Policy]

The Borough will work with appropriate state agencies, village governments, and private organizations or individuals, as funding and staff allow, to identify and designate additional coastal areas which are important to the study, understanding, or illustration of national, state, or local history or prehistory.

Kenai Peninsula Borough
Coastal Management Program
Definitions

ACMP is the Alaska Coastal Management Program.

ADF&G is the Alaska Department of Fish and Game. They are responsible for administering fish and wildlife resources within the state.

AMSA is an Area Meriting Special Attention; these are places that represent a delineated geographic area within the coastal area which is sensitive to change or alteration and which, because of plans or commitments or because a claim on the resources within the area delineated would preclude subsequent use of the resource to a conflicting or incompatible use, warrants special management attention, or which, because of its value to the general public, should be identified for current or future planning.

Aquatic Farming shall mean the growing, farming, or cultivating of aquatic plants, fish, or shell fish in captivity or under positive control to be sold or offered for sale.

Base Flood shall mean the flood having one percent chance of being equaled or exceeded in any given year. Also referred to as the 100-year flood.

Borough shall mean the Kenai Peninsula Borough.

Coastal Water means all water bodies in the coastal area, including wetlands and the intertidal areas.

Conditionally Consistent means that a project can be made consistent with recommended stipulations.

Consistency means compliance with the standards of the ACMP, including the enforceable policies of an approved coastal resource district program. This term is vital to the Kenai Peninsula Borough's coastal management program.

Consistent to the maximum extent practicable means the activities, including projects directly affecting the coastal zone, must be consistent with the ACMP, including approved district programs, to the fullest degree permitted by law.

DEC is the Alaska Department of Environmental Conservation; it manages the state's air and water quality, solid waste disposal and other environmental programs.

Development means any man-made changes to improved or unimproved lands and coastal waters, including but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling.

DGC is the Division of Governmental Coordination, within the Office of the Governor. It oversees the development of coastal programs and coordinates responses from coastal districts and state agencies on consistency.

DNR is the Alaska Department of Natural Resources; it is responsible for the inventory and management of all the state's surface and subsurface resources except fish and game, which includes land, waters, tidelands, timber, minerals, oil, and natural gas.

Due deference means that deference which is appropriate in the context of the commentor's expertise and area of responsibility, and all the evidence available to support any factual assertions (6 AAC 50.120(a)). This applies during a consistency determination made by the state agency to a coastal district or state review agency consistency recommendation and the supporting evidence they provide with their recommendation.

Feasible means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, technical, and safety factors.

Feasible and prudent means to be consistent with sound engineering practice and not causing environmental, social, or economic problems which outweigh the public benefit to be derived from compliance with the standard which is modified by the term.

Floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively

increasing the water surface elevation more than a designated height, usually one foot, at any point.

Important fishing areas are areas used consistently over time for commercial, sport, or subsistence fishing. Fishing includes harvesting marine invertebrates and plants.

Important Habitats are discrete geographical areas that support essential life history requirements of fish or wildlife species. These essential areas encompass one or more of the following: (1) pupping, calving, colonial nesting, spawning, rearing, wintering, migration, important feeding, and haul-out areas; (2) highly productive breeding and nesting areas; (3) sites providing unique population elements including high seasonal use and concentration areas or isolated with endangered species; (5) unique ecological systems; and (6) areas supporting a large portion of the individuals or species of a fish or wildlife population in the region during specific seasons.

Maintain means to provide for continuation of current conditions and function.

Mariculture is the captive cultivation of plants and animals in marine and estuarine waters for human consumption.

Mean High Water is the mean height of tidal high waters at a particular point or station over a period of time to such a length that increasing its length does not appreciably change this mean. For tidal waters, the cycle of change covers a period of 19-years and mean high water is defined as the average of high waters over a 19-year period.

Mean Higher High Water is the average of all the daily higher high water recorded over a 19-year period or a computed equivalent period. It is usually associated with a tide exhibiting mixed characteristics.

Mean Low Water is the mean height of all low waters at a particular point or station over a period of time. For tidal waters, the cycle of change covers a period of 19-years and mean low water is defined as the average of low waters over a 19-year period. For any body of water, it is the mean of all low waters over a period of time of such length that increasing its length does not appreciably change this mean.

Mean Lower Low Water is the average of all the daily lower low water recorded over a 19-year period or a computed equivalent period. An approximation of this level,

called the lower low water datum, is used as a tidal datum in some areas, including the Pacific Coast of the United States.

Minimize means to select from a comprehensive review of alternatives the option which uses the best available technology to limit or reduce impact to the smallest amount, extent, duration, size, or degree.

One Hundred Year Flood is a flood of a magnitude which can be expected to occur on an average of once every 100 years. It is possible for this size flood to occur during any year, and possible in successive years. It would have a one percent chance of being equaled or exceeded in any year. Statistical analysis of available streamflow or storm records, or analysis of rainfall or runoff characteristics of the watershed, or topography and storm characteristics are used to determine the extent and depth of the 100-year flood.

Planning Department means the Planning Department of the Kenai Peninsula Borough.

Proper and improper uses are the can-do and can't-do uses for the area.

Resource Agency means any of the following state departments; Fish and Game, Natural Resources, Environmental Conservation.

Seiche Waves means an oscillation or vibration of the surface of a lake or land-locked sea resulting from seismic or atmospheric disturbance and varying in intervals of just a few minutes to several hours.

Shall means mandatory; it requires a course of action or set of conditions to be achieved.

Should states intent for a course of action or set of conditions to be achieved. This implies that discretion may be applied for achieving the intent of the action.

Significant Impact is defined in Section 46.40.210(5) of the Alaska Coastal Management Act as a use, or an activity associated with the use, which proximately contributes to a material change or alteration in the natural or social characteristics of a part of the state's coastal area, and which: a) would have a net adverse effect on the quality of the resources of the coastal area; b) would limit the range of alternative uses of the resources of the coastal area; or c) would constitute a tolerable change or

alteration of the resources withing the coastal area but which, cumulatively, would have an adverse effect.

Subject uses is a description of the land and water uses and activities which are subject to the district program.

Subsidence is a lowering in elevation of ground surface due to underground geologic or hydrologic change. It can be a common occurrence in areas susceptible to seismic activity and where excessive water table depletion occurs.

Toxic Substances means those substances or substance combinations, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism, either directly from the environment or indirectly by ingestion through the food chains, will, on the basis of information available, cause death, disease, behavioral or physiological abnormalities, malignance, genetic mutations, or physical deformations, in affected organisms or their offspring.

Tsunami is a great sea wave produced by submarine earth movements or volcanic eruption.

Uses of state concern means those land and water uses which would significantly affect the long-term public interest; these uses, subject to Coastal Policy Council definition of their extent, include:

a) Uses of national interest, including the sue of resources for the siting of ports and major facilities which contribute to meeting national energy needs, construction and maintenance of navigational facilities and systems, resource development of federal land, and national defense and related security facilities that are dependent upon coastal locations;

b) Uses of more than local concern, including those land and water uses which confer significant environmental, social, cultural, or economic benefits or burdens beyond a single coastal resource district.

c) Siting of major energy facilities, activities pursuant to a state oil and gas lease, or large scale industrial or commercial development activities which are dependent on a coastal location and which, because of the magnitude of their effect on the economy of the state or the surrounding area, are reasonably likely to present issues of more than local significance;

d) Facilities serving state wide or inter-regional transportation and communication needs; and

e) Uses in areas established as state parks or recreational areas under AS 41.21 or as state game refuges, game sanctuaries or critical habitat areas under AS 16.20.

Water dependent means a use or activity which can be carried out only on, in or adjacent to, water areas because the use requires access to a water body. Examples: marine terminals such as the state ferry dock, cruise ship docks, dock and marine repair yards, fuel docks, dry storage areas and moorage, seafood processing and loading areas.

Water related means a sue or activity which is not directly dependent upon access to a water body but which provides goods or services that are directly associated with water-dependence and which, if not located adjacent to water, would result in a public loss of quality in the goods or services offered.

Wetlands includes both freshwater and saltwater wetlands; “freshwater wetlands” means those environments characterized by rooted vegetation which is partially submerged either continuously or periodically by surface freshwater with less than .5 parts per thousand salt content and not exceeding three meters in depth; “saltwater wetlands” means those coastal areas along sheltered shorelines characterized by halophytic hydrophytes and macroalgae extending from extreme low tide to an area above extreme high tide which is influenced by sea spray or tidally induced water table changes.

Kenai Peninsula Borough
Coastal Management Program
Boundaries

The new coastal management boundary for the Kenai Peninsula Borough Coastal Management Program is defined as follows:

> **Landward Limit:** The land area below the 1,000 foot elevation contour and all islands in their entirety.
>
> **Seaward Limit:** The three-mile limit of State jurisdiction.

This boundary is an increase from the State's Interim Boundary in the three areas where the Interim Boundary was the 400 foot elevation: The Kenai lowland area between Chickaloon Bay and Tustumena Lake; the Fox River area; and the Beluga Lake and River area. Along the Southeastern coastline of the Kenai Peninsula from Muka Island to Resurrection Bay the 1,000 foot elevation boundary is largely a decrease. In the rest of the Borough, the new boundary is the same as the 1,000 foot Interim Boundary, Figure A represents the new coastal management boundary for the Kenai Peninsula Borough.

The increase from the 400 foot elevation to the 1,000 foot elevation in three areas of the Borough provides additional review of activities which could affect the anadromous fish in the upper Kenai River and Kenai Lake area, the Fox River drainage and the lowlands in the Beluga area. The change of the Interim Boundary from an approximation of the timberline along the southeastern coast of the Peninsula extends inland only to the extent necessary to manage uses and activities which are dependent on marine coastal waters. These changes establish a consistent Borough-wide coastal management boundary at the 1,000 foot elevation and reduce confusion resulting from a boundary which jumps back and forth from 400 feet to 1,000 feet in elevation and in extreme cases to above 4,000 feet.